portion of its substance, abstracted, and the rust produced being
a compound of the iron and oxygen.

In the ordinary style of speaking and writing, we fix on one
of the concurring precedents as the *cause*, and we call the other
the *circumstances*, and we speak of the same cause in the same
circumstances producing the same effects. In fixing on one of the
precedents as the cause, we commonly single out the one which
is most prominent, or to which we wish to give the greatest
prominence. But when we speak of the real cause, the uncon-
ditional cause, the cause which will for ever be followed by the
effects, we must embrace not only what is vulgarly called the
cause, but also the *circumstances* or *conditions*—as ia the above
illustrations—not only the sunbeams, but the juices also; not
only the frost, but the nature of the plant; not only the ball in
motion, but the ball at rest; not only the air, but the iron. It
is only when we do this, and make the maxim take this form—
that the same material substances, bearing the same relation in
respect of their properties, always produce the same effects—
that it becomes philosophically correct.[4]* Even for practical
purposes, it is often desirable that it should assume this form,
for us long as we merely talk of the cause being followed by the
same effect in *similar* circumstances, we are apt to lose ourselves
in determining what constitutes the similar circumstances, f

* These views had occurred to the author before he rend Mr. John 3. Mill's •very masterly work on Logic. Mr. Mill has seen the defect in the common state-ments, but has not, in consequence of not giving the properties of foodies their proper place, discovered the thorough rectification. **Tho statement of the cause i.s incomplete, unless in some shape or other we introduce all the conditions. A man takes mercury, goes out of doors, and catches cold. We .say, perhnps, that the cause of his taking cold was expuHurc to the air. It is clear, however, that his having taken mercury may have been a necessary condition of his catching cold; and though it might consist with usage to say that the cause of his attack was exposure to the air, to he accurate we ought to say, that the cause was expo-

sure to air while under the effect of mercury. (Book III. chap* v. § <i, ed. 8d.) The true cause here was the body in a particular state—that is, under mercury—and the air in a particular state; and the co-existence of tlte two is necessary to the production of the effect. Mr. Mill has Keen that the unconditional cause in often (it is always) dual or plural, but he has not noticed that the effect must be the same* The true cause consists of two or more bodies in a particular state; the true effect consists of the same bodies in a different Bfcate. Hence Mr. Mill's error, (Book HI. chap. x. | 1,) in supposing that the same effect can be produced by several caufles. A part of the effect may, but not the whole

• }" Hae farther discussion on the RELATION IUVTWRBN' CAUSE AND KFFKGT, in Appendix m.